



Suicide and drought in New South Wales, Australia, 1970-2007

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Abstract:

There is concern in Australia that droughts substantially increase the incidence of suicide in rural populations, particularly among male farmers and their families. We investigated this possibility for the state of New South Wales (NSW), Australia between 1970 and 2007, analyzing data on suicides with a previously established climatic drought index. Using a generalized additive model that controlled for season, region, and long-term suicide trends, we found an increased relative risk of suicide of 15% (95% confidence interval, 8%-22%) for rural males aged 30-49 y when the drought index rose from the first quartile to the third quartile. In contrast, the risk of suicide for rural females aged >30 y declined with increased values of the drought index. We also observed an increased risk of suicide in spring and early summer. In addition there was a smaller association during unusually warm months at any time of year. The spring suicide increase is well documented in nontropical locations, although its cause is unknown. The possible increased risk of suicide during drought in rural Australia warrants public health focus and concern, as does the annual, predictable increase seen each spring and early summer. Suicide is a complex phenomenon with many interacting social, environmental, and biological causal factors. The relationship between drought and suicide is best understood using a holistic framework. Climate change projections suggest increased frequency and severity of droughts in NSW, accompanied and exacerbated by rising temperatures. Elucidating the relationships between drought and mental health will help facilitate adaptation to climate change.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3435226>

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Extreme Weather Event

Extreme Weather Event: Drought

Geographic Feature:

resource focuses on specific type of geography

Rural

Geographic Location:

Climate Change and Human Health Literature Portal



resource focuses on specific location

Non-United States

Non-United States: Australasia

Health Impact:

specification of health effect or disease related to climate change exposure

Injury, Mental Health/Stress, Other Health Impact

Other Health Impact: Suicide

Medical Community Engagement:

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Workers

Other Vulnerable Population: men;farmers or farmworkers

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified